

| CONSTRUCTION AND GENERATING COSTS | | | |
|-----------------------------------|----------|---------|------------------|
| Station | Size | Cost/KW | Generating costs |
| <i>Coal :</i> | | | |
| Ferrybridge C | 2,000 MW | £40 | 0.55 pence/KWh |
| Ratcliffe | 2,000 MW | £41 | 0.54 " |
| Cottam | 2,000 MW | £44 | 0.56 " |
| <i>Nuclear</i> | | | |
| Oldbury | 600 MW | £113 | 0.74 " |
| Wylfa | 1,180 MW | £108 | 0.70 " |
| Dungeness B | 1,200 MW | £81 | 0.57 " |
| Hinkley B | 1,250 MW | £71 | 0.52 " |

Hinkley B. Ratcliffe seems likely to generate at a fraction of a penny less. But it is doubtful that Ferrybridge will be used to supply base load, except perhaps in the first few years of its life. That function is likely to fall to the nuclear stations, with their much smaller fuel costs and less flexible start-up characteristics. For this reason, the staff at Ferrybridge have been conducting tests to see how quickly the station can be started up or shut down. This will be necessary if it is to be used to follow load.

INDUSTRY

Unwilling Partner

TAKEOVER bids these days have to be justified by elaborate arguments—the Industrial Reorganization Corporation sees to that. But last week's bid by the Plessey Company for control of English Electric is even more involved than most. On the one hand, Plessey says that a merger will make rationalization possible in areas where the two companies overlap. On the other, it is equally happy to argue that where there is no overlap the two companies will be complementary, and together would produce a wider range of goods for world markets.

The Plessey bid is worth £263 million, and together the two companies would form a group even larger than GEC/AEI. While English Electric encompasses products all the way from micro-circuits to large generating sets, Plessey is concentrated at the lighter end of the market. It is a major manufacturer of telephone equipment, and has substantial radar interests bought from Decca. It also has interests in electronic and electrical components, in automation and in "dynamics"—which includes pumps, actuators, valves and the like used in aircraft and industrial control systems. English Electric is a much bigger group; at the heavy end of the market it makes switchgear, transformers and generating sets. It also has a substantial interest in broadcasting equipment, in process control (through Elliott Automation), in aviation radar, and in diesels and dynamics. The principal area of overlap comes in electronics, automation and telecommunications. Only in the third of these can Plessey seriously be considered the senior partner.

Lord Nelson, chairman of English Electric, has said that he cannot understand the industrial logic behind the bid, which implies that he thinks there is none. Although the Industrial Reorganization Corporation has not yet made up its mind, it will have to take a stand eventually, because English Electric owes it £15

million, borrowed when Elliott Automation was taken over. It would have to give its sanction for the loan to be taken over by Plessey. The other interesting aspect of the bid is that it would give Plessey—never much of a success in computers—a 36 per cent share in International Computers Ltd. This would double its existing shareholding, and the other holders of ICL stock, like Vickers, Ferranti or the Government, might not feel too happy about it. There is also English Electric's 40 per cent interest in the British Aircraft Corporation to be considered. In this sense, a merger between English Electric and Hawker Siddeley would be a much greater contribution to rationalization.

As befits companies in advanced industries, both Plessey and English Electric do their share of research. English Electric, perhaps in the hope of reserving the big guns for its chairman's riposte to the Plessey bid, refuses to say how many people are employed in research or how much is spent. But it runs two laboratories in Stafford, one carrying out research into electrical power supply equipment and the other concerned with the engineering problems of electricity generation and supply. There is a mechanical engineering laboratory in Whetstone, Leicestershire, where there is also a central metallurgical laboratory. The Marconi company has a research division in Essex, concerned with electronics research. Elliott Automation runs eight laboratories, although some of these may have been taken over by ICI.

Plessey is a little more forthcoming about its research activities. Of its 68,000 employees, 7,000 are said to be employed on research and development and the total research effort costs "over £20 million a year". The central research department, the Allen Clark Research Centre, is at Towcester in Northamptonshire, and is a materials laboratory. The Electronics Group has a research laboratory at Romsey in Hampshire, and another at Havant. There is an environmental test laboratory at Fareham in Hampshire, and telecommunications research is done at Maidenhead in Berkshire. Apart from the Caswell Laboratory, Plessey says that all its research is applied.

Clearly there is considerable scope for rationalization of research; in fact, as in some other British companies, there may be a case for rationalization whether or not the deal goes through. But if it does, research expenditure is likely to be one of the first targets and, if the AEI/GEC pattern is anything to go by, a number of the scientific staff are likely to find themselves out of work.

CLIMATE

London's Weather

MR J. H. BRAZELL of the Meteorological Office has compiled a book of weather statistics for the London area which promises to become a well-thumbed reference (*London Weather*, HMSO, 55s.). The objective is to bring up to date the previous classic *A Century of London Weather* by W. A. L. Marshall, which was published in 1952 and which described London's weather from 1841 to 1949. The year 1841 is a watershed in the statistics because it is the first year for which regular official meteorological observations are available—observations in the London area started in November 1840 at the Royal Observatory, Greenwich.